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(54) Title: SCYTOVIRINS AND RELATED CONJUGATES, FUSION PROTEINS, NUCLEIC ACIDS, VECTORS, HOST CELLS, COMPOSITIONS, ANTIBODIES AND METHODS OF USING SCYTOVIRINS

(57) Abstract: An isolated or purified antiviral protein consisting essentially of the amino acid sequence of SEQ ID NO: 1, an amino acid sequence that is about 90% or more identical to SEQ ID NO: 1, an amino acid sequence that is about 90% or more homologous to SEQ ID NO: 1, or an antiviral fragment of any of the foregoing; a variant, fusion protein or conjugate thereof; a composition comprising (i) at least one of the foregoing and (ii) a carrier, excipient or adjuvant; an isolated or purified nucleic acid consisting essentially of a nucleotide sequence encoding the amino acid sequence of the aforementioned antiviral protein or antiviral fragment thereof, or a variant or fusion protein of either of the foregoing; an isolated cell comprising an above-described isolated or purified nucleic acid; a composition comprising (i) an above-described isolated or purified nucleic acid, and (ii) a carrier, excipient or adjuvant; a method of inhibiting a viral infection of a host comprising administering a viral infection-inhibiting amount of at least one of an above-described antiviral protein or an antiviral fragment thereof, a variant or fusion protein of either of the foregoing, an above-described nucleic acid, or an isolated cell comprising an above-described nucleic acid; a method of inhibiting a virus in a biological sample or in/on an inanimate object comprising contacting the biological sample or the inanimate object with a viral-inhibiting amount of at least one of an above-described antiviral protein or an antiviral fragment thereof, or a variant, fusion protein or conjugate of either of the foregoing, antibodies and composition thereof, and a method of inhibiting infection of a mammal with a virus comprising administering to the mammal an anti-scytovirin antibody in an amount sufficient to induce in the mammal an immune response to the virus.

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